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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,012	12/27/2001	Gary E. Western	29250/CE08435R	7848
29978	7590	08/13/2004		
MARSHALL, GERSTEIN & BORUN (MOTOROLA) 233 SOUTH WACKER DRIVE SUITE 6300 CHICAGO, IL 60606-6402				
EXAMINER DAVIS, TEMICA M				
ART UNIT		PAPER NUMBER		
2681		3		

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,012

Applicant(s)

WESTERN, GARY E.

Examiner

Temica M. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Moio, WO 01/45445 A1.

Regarding claim 1, Moio discloses in a communication network including a radio network providing communication services to a plurality of mobile stations operating within the radio network, wherein each mobile station is in communication with the radio network via an associated communication link, a method for scheduling the communication services comprising the steps of: for each mobile station

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determining a characteristic of the associated communication link (page 10, lines 8-10); forming a group of the plurality of mobile stations based upon the characteristic of the associated communication link (page 3, line 31-page 4, line 1 and page 11, lines 15-26); and scheduling communication services collectively for the group (page 11, lines 15-26).

Regarding claim 2, Moisio discloses the method of claim 1, wherein the characteristic comprises at least one of the group of characteristics comprising: path loss, power control setting, bit error rate and delay (page 9, lines 7-15).

Regarding claim 3, Moisio discloses the method of claim 1, wherein the step of forming a group comprises forming a plurality of groups of the plurality of mobile stations, and the step of scheduling communication services collectively for the group comprises scheduling communication services collectively for each group (page 11, line 15-page 12, line 7).

Regarding claim 4, Moisio discloses the method of claim 3, wherein each group comprises mobile stations of the plurality of mobile stations having substantially alike characteristics of the communication links (page 10, line 25-page 11, line 10).

Regarding claim 5, Moisio discloses the method of claim 3, wherein the step of scheduling communication services collectively for each group comprises scheduling communication services for each group of the plurality of group on a recurring basis (page 11, line 15-page 12, line 7).

Regarding claim 6, Moisio discloses the method of claim 3, wherein the step of scheduling communication services collectively for each group comprises scheduling

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communication services for each group of the plurality of group on a sinusoidal basis (i.e., periodically updated) (page 12, lines 1-4).

Regarding claim 7, Moisio discloses the method of claim 1, wherein the step of determining a characteristic of the associated communication link comprises determining a power control state (page 15, lines 5-8 and page 17, lines 25-32).

Regarding claim 8, Moisio discloses the method of claim 1, wherein the step of scheduling communication services collectively for the group comprises transmitting schedule information to the group of the plurality of mobile stations (page 16, lines 20-22).

Regarding claim 9, Moisio discloses the method of claim 1, wherein the step of scheduling communication services collectively for the group comprises scheduling communication services for the group so as to minimize the transmit power to reach each mobile station of the group of mobile stations (to reduce interference) (page 13, lines 15-17 and page 15, lines 1-10).

Regarding claim 10, Moisio discloses the method of claim 1, wherein the group comprises a first mobile scheduled to receive a downlink transmission and a second mobile station requesting an uplink timeslot (page 14, line 32-page 15, line 15).

Regarding claim 11, Moisio discloses an apparatus for scheduling communication services within a communication network, the communication network providing communication services to a plurality of mobile stations operating within the radio network, wherein each mobile station is in communication with the communication network via an associated communication link, the apparatus comprising: a base station

system operable to establish and maintain communication links between the communication network and the plurality of mobile stations and further being operable to determine a characteristic of each of the communication links (page 3, line 31-page 4, line 12); a scheduling algorithm within the base station system, the base station system operating in accordance with the scheduling algorithm to group the plurality of mobile stations based upon the characteristics, and to schedule communication services collectively for the group (page 6, lines 9-14).

Regarding claim 12, Moizio discloses the apparatus of claim 11, wherein the characteristic comprises at least one of the group of characteristics comprising: path loss, power control setting, bit error rate and delay (page 9, lines 7-15).

Regarding claim 13, Moizio discloses the apparatus of claim 11, wherein the base station is operates in accordance with the scheduling algorithm to form a plurality of groups of the plurality of mobile stations and to schedule communication services for the groups (page 11, line 15-page 12, line 7).

Regarding claim 14, Moizio discloses the apparatus of claim 13, wherein each group comprises mobile stations of the plurality of mobile stations having substantially alike characteristics of the communication links (page 10, line 25-page 11, line 10).

Regarding claim 15, Moizio discloses the apparatus of claim 13, wherein the scheduling algorithm comprises a recurring scheduling algorithm (page 11, line 15-page 12, line 7).

Regarding claim 16, Moizio discloses the apparatus of claim 13, wherein the scheduling algorithm comprises a sinusoidal scheduling algorithm (page 12, lines 1-4).

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Conclusion

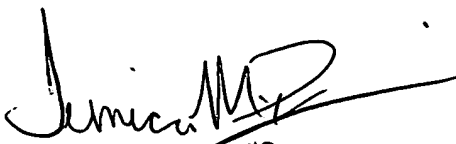
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Davis whose telephone number is (703) 306-5837. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Temica M. Davis
Examiner
Art Unit 2681

August 11, 2004


TEMICA M. DAVIS
PATENT EXAMINER